APPENDIX 8a
Virginia DEQ letter and policy on in-water hull cleaning

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE
5636 Southern Boulevard, Virginia Beach, Virginia 23462
(757) 518-2000 Fax (757) 518-2103
www.deq.virginia.gov

L. Preston Bryant, Jr
Secretary of Natural Resources

David K. Paylor
Director

Francis L. Daniel
Regional Director

Ms. Nancy Easterbrook
Cayman Islands Tourism Association
P.O. Box 31435
Grand Cayman KY1 -1 206
Cayman Islands

September 7, 2007

Dear Ms Easterbrook:

Re: Kittiwake Reefing

This letter supersedes the letters of August 28 and 29, 2007, concerning the hull cleaning of the Kittiwake within the Hampton Roads harbor of Virginia.

Based on the information that you have supplied, the Department has no objection to the hull cleaning of the Kittiwake at DMG in Norfolk, Virginia. Normally it is our preference for these hulls to be cleaned as they are moored at the JRRF site in the James River due to the excellent flushing characteristics of that riverine system. This same characteristic is not true for the Eastern Branch of the Elizabeth River. Consequently, it is important for all practicable precautions to be taken in the performance of this work. This hull cleaning project should at a minimum follow the instructions for hull cleaning in the U.S. Coast Guard memo of December 27, 2006, titled Hull Fouling and Movement of MARAD NDRF Vessels and its accompanying Interim Guidance Criteria for Cleaning Hulls of MARAD Vessels Prior to Relocation. In addition, you may wish to read Naval Ship Manual, Chapter 081 (S9086 CQ-STM-010/CH081R4) and/or National Uniform Discharge Standards for Vessels. The above mentioned documents were supplied in my previous letter. MARAD has developed and uses a system for hull cleaning that catches much of the particulate that is generated. I would urge you to check with them and study their approach.

Please notify us when these activities will take place so that if there are citizen complaints we will be in a better position to reply to them. We wish you the best of luck on this reefing project. Please contact me if I can be of further assistance.

Sincerely,

Francis L. Daniel

Francis L. Daniel

DRAFT
Interim Criteria for Cleaning Hulls of MARAD Vessels Prior to Relocation for Disposal

Commandant (G-PSO-4)
U. S. Coast Guard

27 June 2006

1. BACKGROUND AND PURPOSE

.1 Coast Guard regulations intended to reduce the transport and introduction of non-indigenous organisms via fouling of ships' surfaces are described in 33 CFR 151, Subpart D section 2035 (5) and (6).

.2 Maritime Administration (MARAD) vessels that are intended to be disposed of through dismantling, reefing, or deep-sea disposal have often been lain up for considerable periods of time, with little or no hull maintenance or cleaning.

.3 Movement of such heavily fouled hulls between geographic locations constitutes a risk of introducing associated organisms to marine and estuarine habitats in U.S. waters where they do not naturally occur.

.4 MARAD is developing a comprehensive programmatic approach, in coordination with the Coast Guard, for minimizing the risks of translocating non-indigenous organisms when vessels must be moved for disposal.

.5 While the Programmatic Plan in (1.4) is being prepared, an interim approach to meeting the requirements of 33 CFR 151.2035(5) & (6) is required for uniform and consistent application to all obsolete MARAD vessels moved for disposal.

.6 These Criteria are intended to provide such consistent guidance for Coast Guard and MARAD personnel relative to actions taken to bring MARAD vessels into compliance with 33 CFR 151.2035.

.7 Actions and criteria may be added or modified over time, as appropriate and necessary.

2. DEFINED ACTIONS

.1 Hull Cleaning - the removal of biological fouling of the underwater hull, appendages, and openings of vessels by mechanical means using brushes, scrapers and similar tools. The purpose of underwater hull cleaning prior to relocation for disposal is to remove excessive biological fouling that has developed over long lay-up periods with little or no regular hull cleaning. The underwater cleaning process, therefore, should remove as much of the accumulated biological fouling as possible. However, given the poor condition of the hulls of some of the obsolete MARAD vessels slated for disposal, and the need to minimize the release of paint / coating residues, it is recognized that the cleaning operation will not remove all of the "hard" fouling. As an interim measure, it is expected that hull cleaning will be conducted in-water prior to the movement of the vessel.

.1 Full Cleaning - the cleaning of the entire underwater hull surface (i.e. painted surfaces), appendages, including propellers and shafts, and openings.

.2 Partial Cleaning - only discrete sections of the hull (e.g., forward one-third or forward two-thirds of the hull), appendages (e.g., rudders, sonar dome, fin stabilizers), and systems (e.g., masker air, hull openings) are cleaned. Partial cleanings may be conducted because the extent and distribution of fouling before movement of the vessel is not uniformly distributed over the entire hull or access for cleaning of the entire underwater hull is limited due to restrictive water depth or visibility. Under such circumstances, partial cleanings are a viable alternative to cleaning the entire hull and all the underwater components, but must be based on a vessel specific assessment that clearly documents the appropriateness of a partial cleaning.

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3. PROCEDURES AND EQUIPMENT

.1 In-water cleaning will be conducted by certified professional divers utilizing hand-held or self-propelled rotary brush equipment, water jets, hydrolance equipment, or other similar industry-recognized equipment.
.2 To minimize removal and release of paints and other coatings, or damage to the physical integrity of the hull, where brushes are used, brush materials will be polypropelene, nylon, or other similar non-metal abrading materials.
.3 In-water hull cleaning will be conducted in accordance with all applicable Federal, State and Local regulations and requirements.
.4 Pre-cleaning inspections by the divers will document the abundance, extent, and type of fouling. This information will be used to select the appropriate cleaning methods and equipment.
.5 Post-cleaning inspections by the divers will document the degree to which the fouling has been removed. At minimum, cleaning will remove all visible soft fouling recognizable as plants or animals. It is recognized that cleaning will not necessarily remove all hard (calcareous) fouling such as barnacles, mussels, calcareous tube worms, etc. However, selection of the cleaning equipment should be conducted so as to remove as much biological fouling as possible, taking into consideration the constraints posed by (3.2).
.6 Underwater color still or video photography will be used to document the nature of the fouling present before and after the cleaning. Where water clarity is poor, a clear-water housing will be used to provide a clear image of the hull and associated fouling. Representative images for before and after cleaning conditions will be included in the inspection documentation, for at least the following areas:

a. forward, mid and aft 1/3 sections of the vessel length, distributed to include near surface, mid-depth, and keel.
b. shaft, skeg, and rudder
c. hull penetrations, including areas around sea chests

.7 The lead diver or other responsible person associated with the divers will verify by signature that the pre- and post-cleaning inspection reports are accurate. Standard hull inspection data/report forms should be developed/used by MARAD for this purpose.

.8 A responsible MARAD party will sign and validate a document certifying that the hull inspection and cleaning activities were carried out.
.9 The diving team must maintain a daily log of the inspection and cleaning operations, to include:

a. Diver and Company Names
b. Cleaning operation dates and hours
c. Ship name
d. Type of cleaning
e. Type and quantity of personnel and equipment on scene
f. Notes on diving conditions, factors affecting the inspection and cleaning activities, and any other appropriate observations.

4. DOCUMENTATION

.1 The following documentation will be submitted to the Coast Guard in conjunction with requests for approval of dead ship tow plans:

a. Inspection and Cleaning Report, signed by the lead diver and a responsible MARAD representative, to include:
    a. Pre- (3.4) and post-cleaning (3.5) inspection reports signed by the lead diver
    b. Concise technical description of cleaning operations performed.
    c. Copies of Daily Dive Team logs (3.9), signed by the lead diver and a representative of MARAD

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P.O. Box 1105, Richmond, Virginia 23218
Fax (804) 698-4500 TDD (804) 698-4021
www.deq.virginia.gov

L. Preston Bryant, Jr.
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

April 13, 2007

Ms. Elizabeth R. Megginson
Chief Counsel
U.S. Department of Transportation
Maritime Administration
400 Seventh St., S.W.
Washington, D.C. 20590

Dear Ms. Megginson:

Thank you for your letter of March 29, 2007, concerning removal and disposal of non-retention vessels from the James River Reserve Fleet (JRRF). Your letter directs itself to potential issues that might be associated with the resumption of the removal of such vessels, specifically, the removal of marine growth from the hulls that might contain invasive species.

As you are well aware, the Commonwealth is very concerned with the presence of so many non-retention vessels moored so close to the shipping channels in the James River. We applaud the progress that MARAD has made in disposing of these vessels in the immediate past years; however, the remaining vessels still pose a threat to Virginia waters, and it is important that MARAD continue its effort to remove them, including removing oil from any new non-retention vessels that are added to the JRRF.

With that in mind, the Commonwealth of Virginia wants to do everything reasonably possible to assist and encourage the federal government to continue disposing of these vessels in a manner that is economically feasible, yet still reasonably assures that the water quality of that segment of the James River is not impaired for future generations. Therefore, we encourage MARAD to continue its environmental stewardship by developing and implementing reasonable best management practices for hull cleaning activities. The Virginia Marine Resources Commission (VMRC) also has responsibilities in this area and concurs with this request. While it is not our intent to hold up further

progress in the removal and disposal of the vessels, we request that you provide a copy of such practices to DEQ and VMRC when complete. We are aware that the U.S. Coast Guard has issued a memorandum for such activities. In addition, you may wish to investigate:

Naval Ships Technical Manual, Chapter 081 (S9086-CQ-STM-010/CH-081R4)

National Uniform Discharge Standards for Vessels

Wherever practical and appropriate, we also encourage non-retention vessels having their hulls cleaned in VPDES-permitted dry-dock facilities. For example, it is our understanding that the *Vandenberg* will have its hull cleaned while in dry-dock. We realize that this was a decision made by government of the state of Florida, but our point is that it was an economically feasible approach under these circumstances.

It is not clear if the Clean Water Act covers hull cleaning activities at anchor, and Virginia does not have a VPDES permit that would address such activities. Therefore, we are not asking that MARAD apply for coverage of hull cleaning activities. If hull cleaning activities are planned in the future, please have the appropriate MARAD representative notify Frank Daniel, DEQ Tidewater Regional Director, and Bob Grabb, Chief, Habitat Management, at VMRC at (757) 247-2250 of the dates and duration of such activities. Additionally, DEQ and VMRC representatives may wish to observe hull cleaning activities from the surface, and I request that you work with them.

We appreciate the fine work that MARAD is doing to remove this threat from the James River, and we look forward to working with you in the future. I hope this letter has answered your questions. If you have further questions on this issue, please contact Frank Daniel at (757) 518-2171.

Sincerely,

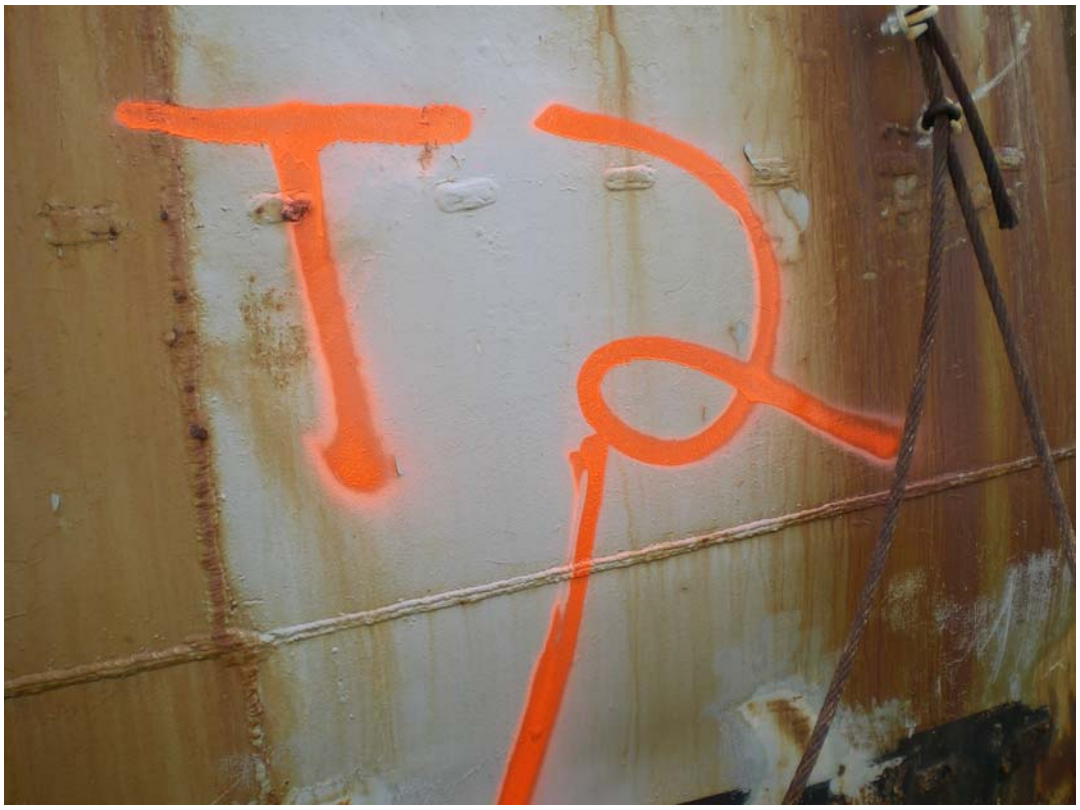
David K. Paylor

DKP:dlm

cc: Frank Daniel – DEQ
Bob Grabb - VMRC

APPENDIX 8b
Photos and lab reports from hull paint samples tested for TBT's

Kittiwake – TBT Paint samples on the anti-fouling paint Sept 2007. The blue pieces of tape are to mark where original samples were. The sample site was extended for the two confirmatory samples and specifically tested for TBTs, in additional to PCBs.



TELEPHONE: (757) 865-0880
TOLL-FREE: (800) 685-2162
FAX: (757) 865-8614

UNIVERSAL LABORATORIES

20 Research Drive Hampton, Va 23666

REPORT OF ANALYSIS

Order ID: 0710469

(REPORT DATE)
18-Dec-07

TO: Dominion Marine
PO Box 152
Chincoteague VA 23336
ATTN: Tim Mullane

Project ID: Kittiwake
Project # N/A
Site: 1P
Matrix: Solid

UL Sample Number: 0710469-001
Sample ID: 1P
Grab Date/Time: 8/21/2007 10:38
Composite Start: N/A
Composite Stop: N/A
Collected By: CLIENT

Comments for Order: ***Please e-mail results to Tmullane@dominionmarine.net***

Parameter	Method	Test Result	Units	UL Report Limit	Analysis Date/Time	Analyst
TBT Tributyltin	GC/FPD	<	mg/Kg	0.5	11/19/2007	JA

Comments for Sample I 0710469-001
No comments

Respectfully Submitted,

Virginia Drinking Water Lab# 00030
VDEQ Lab #000003

North Carolina Drinking Water Lab # 51706
North Carolina Wastewater/Groundwater Lab # 543

EPA LAB CODE VA00012 0710469-001

TELEPHONE: (757) 865-0880
TOLL-FREE: (800) 695-2162
FAX: (757) 865-8014

UNIVERSAL LABORATORIES

20 Research Drive Hampton, Va 23666

REPORT OF ANALYSIS

Order ID: 0710469

(REPORT DATE)
18-Dec-07

TO: **Dominion Marine**
PO Box 152
Chincoteague VA 23336
ATTN: Tim Mullane

Project ID: Kittiwake
Project # N/A
Site: 1S
Matrix: Solid

UL Sample Number: 0710469-002
Sample ID: 1S
Grab Date/Time: 8/21/2007 10:56
Composite Start: N/A
Composite Stop: N/A
Collected By: CLIENT

Comments for Order: ***Please e-mail results to Tmullane@dominionmarine.net***

Parameter	Method	Test Result	Units	UL Report Limit	Analysis Date/Time	Analyst
TBT Tributyltin	GC/FPD	<	mg/Kg	0.5	12/19/2007	JA

Comments for Sample I 0710469-002
No comments

Respectfully Submitted,

Virginia Drinking Water Lab# 00030
VDEQ Lab #000003

North Carolina Drinking Water Lab # 51706
North Carolina Wastewater/Groundwater Lab # 543

EPA LAB CODE VA00912 0710469-002